

The Bayou Observer



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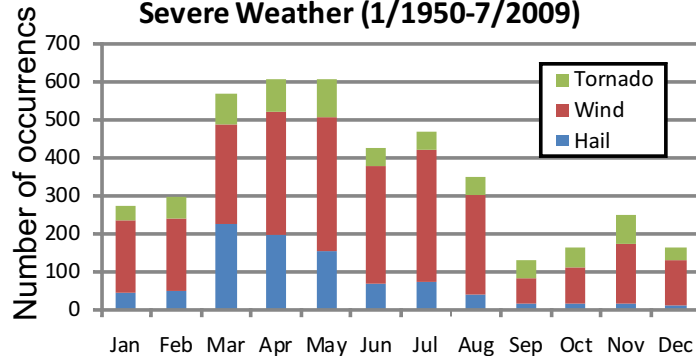
Serving South Mississippi
&
Southeast Louisiana

Severe Weather Awareness Week

Danielle Manning

Severe Weather Awareness Week will take place from February 21st to February 26th this year. Severe weather affects all parts of the United States to varying degrees and can occur at any time of the year. All severe weather is capable of causing property damage, personal injuries or even loss of life, so while severe weather is not a common occurrence across the northern Gulf Coast region, it should not be taken lightly.

S.E. Louisiana and S. Mississippi
Severe Weather (1/1950-7/2009)



There are three hazards associated with severe weather large hail, strong/damaging winds, and tornadoes and all modes are possible across the region. However, strong and damaging wind is by far the most common mode for the local area, accounting for more than 60 percent of all reported severe weather across Southeast Louisiana and Southern Mississippi. Large hail accounts for 21 percent of reported severe weather, and tornadoes account for the remaining 17 percent.

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As previously stated, severe weather can occur during any time of the year. However, along the northern Gulf Coast, it is most likely during the spring months with a secondary peak during November. Concerning the time of day when severe weather is most likely, severe storms generally develop during the afternoon hours when daytime heating helps to destabilize the atmosphere. If severe weather occurs outside of the afternoon hours, it is usually in response to some larger scale forcing such as a cold front or upper level low moving through the area.

When conditions appear favorable for severe weather, the National Weather Service will issue a Severe Thunderstorm Watch or Tornado Watch. When watches are in effect, residents should stay alert for rapidly changing weather conditions and be ready to take action if warnings are issued. These warnings will be issued any time National Weather Service forecasters feel severe weather is an imminent threat to a given area. When a warning is issued (whether it is a Severe Thunderstorm Warning or a Tornado Warning) residents in the warned area should seek safe shelter immediately.

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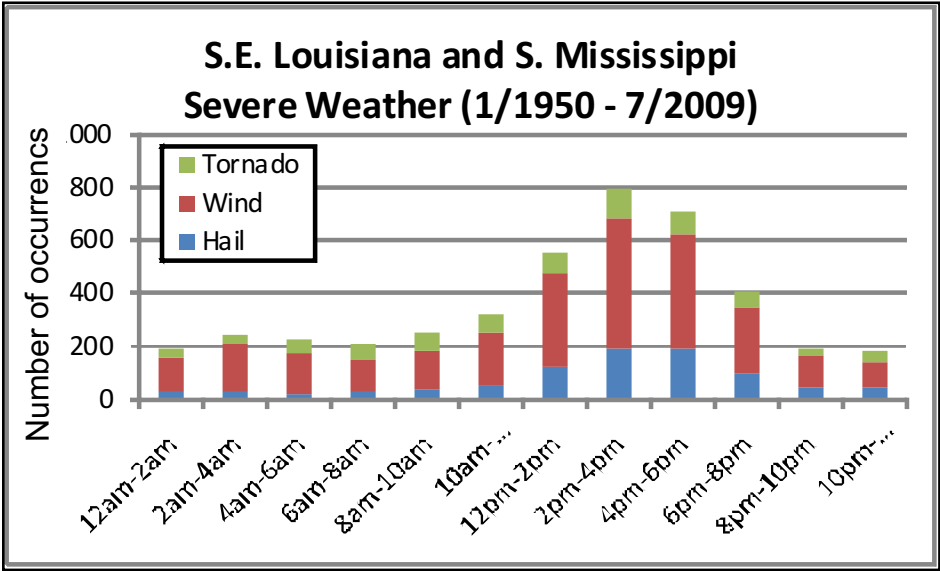


Severe Weather Awareness Week continued

So what is considered a safe shelter? Well that depends on where you are and what is available. In your home (unless it is a mobile home or trailer), move to a small interior room or hallway on the lowest floor and if possible, get under a sturdy piece of furniture. If you live in a mobile home or trailer, you are not safe. The thin walls of mobile homes are very vulnerable to wind-blown debris, and mobile homes can also be overturned by strong wind gusts or tornadoes even if they are properly tied down. For this reason, you need to move to a sturdier shelter or leave the mobile home and lie flat in a ditch or on other low ground, protecting your head. Office buildings, hospitals, schools and other large structures typically have designated shelters, so move quickly to those areas.

If you are unfortunate enough to be caught outside when warnings are issued, try to find shelter in a sturdy structure. If no such shelters are available, try to lie as low on the ground as possible, preferably in a ditch. Being low to the ground will reduce your risk of being impacted by wind-blown debris or being struck by lightning. Do not try to outrun a severe thunderstorm or tornado in your car, and do not seek shelter from a tornado beneath a highway overpass.

To be prepared for any severe weather, you and your family should try to develop an action plan for responding to warnings issued for your area. At a minimum, this plan should include designated shelter areas within or near your home. Additionally, if you do not already have one, consider purchasing a NOAA weather radio with SAME (specific area message encoder) capability. These radios can be programmed to alarm any time a warning is issued for your specific area, hopefully giving you enough time to take shelter ahead of the storm. NOAA weather radio is particularly useful at night when you are sleeping and may not have a commercial radio or a television station turned on. Remember that the best defense for severe weather is to be prepared.



LIX in the Community Past Outreach Events

Danielle Manning

Outreach events during the winter months are generally scarce, and this winter was no exception. The WFO hosted three different tours for groups of boy scouts and girl scouts. The scouts were all working on weather merit badges and were excited to learn about what the National Weather Service does. The weather balloon launch at the end of the tour is always a huge hit as well!

In December and January, staff members from WFO LIX visited several of our local Cooperative Observers. In addition to ensuring that all equipment is functioning properly and that no additional supplies are needed, these visits serve to let the observers know how much we appreciate their service. Some of our Co-op Observers have been sending in daily reports for more than 20 years! For more information concerning the Cooperative Observer Program, please see the article written by Ashley Hayes.

On January 28th, Frank Revitte and Mike Efferson travelled to East Baton Rouge Parish to visit the Emergency Managers from the area, and also to give a Storm Spotter Talk. About 50 people attended the talk and learned about the different types of severe weather, as well as when severe weather is most likely and when to report weather events to the National Weather Service.



For more information about these and other outreach events or to request NWS participation in an event, please contact our office. You can reach us by email at <SR-LIX.Webmaster@noaa.gov> or by phone at 504-522-7330x4 or 985-649-0429x4.

Upcoming outreach events include participation in the New Orleans area Science Bowl and MathCounts competitions. Additionally, on April 28, The NOAA P-3 Orion - Hurricane Hunter/Wx Research Plane will be making a stop in Baton Rouge. This tour passes through our area every other year on average. The last time the plane made an appearance in Southeast Louisiana, it stopped at New Orleans Lakefront Airport in April 2008. Tours of the plane will be open to the public and staff members from the National Hurricane Center will be on hand to answer questions. Available tour times have not yet been set. Please contact the National Weather Service as the date approaches for more information.

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Mardi Gras is a large cultural happening that takes place every year across the Gulf States, with its origins dating back to 1700s France. In the United States, the festivities started in the Mobile, Alabama area and spread westward to New Orleans and Galveston during the 1800s. Though Mardi Gras is French for Fat Tuesday, it is typically considered a season that starts on King's Day or Candlemas, January 6th and ends on Fat or Shrove Tuesday, the day before Ash Wednesday. Since Ash Wednesday is determined by the Spring Equinox, Mardi Gras Day can only occur on a day between February 3rd and March 9th. The National Weather Service maintains a record of past Mardi Gras weather dating back to 1874. Below are some weather facts surrounding Mardi Gras.

Rainfall has occurred on 43 out of 136 years, making the average chance of measurable rainfall on a Mardi Gras Day 32 percent. Due to the wide range of dates on which Mardi Gras can fall, and the large temperature range during the early spring, the temperatures experienced on Mardi Gras day also vary significantly. New Orleans has experienced 7 out of 136 years with daytime temperatures on Mardi Gras Day reaching at least 80 °F (approximately a 5 percent chance). Conversely, Mardi Gras Day has seen freezing temperatures at or below 32 °F on 8 out of 136 years, or approximately 6 percent of the time.

	High	Low	Rainfall
Record	83 °F (2/20/1917)	22 °F (2/14/1899)	2.12" (3/1/1927)
Average	66.2 °F	48.8 °F	0.11"

A few other records concerning Mardi Gras:

- The warmest morning low was 70F, occurring on February 8, 1921 and again on February 5, 2008
- The coldest afternoon high was 38F, occurring on February 14, 1899

Incidentally, the coldest day ever in New Orleans recorded weather history occurred on Lundi Gras, February 13, 1899. The low temperature that morning was 7 °F. That Mardi Gras saw about 3 inches of snow on the ground that would have to be removed before parades could roll. The King of Rex promised the city of New Orleans that if residents along St. Charles Avenue would remove the snow, the Krewe would still parade along the route. Today, the Mardi Gras season attracts nearly 1 million tourists to the Crescent City to take part in the two weeks of festivities.

This year Mardi Gras falls on February 16. The normal high and low temperatures for February 16 are 65 °F and 46 °F, respectively. The record high and low temperatures are 82 °F (occurring in 2001) and 29 °F (occurring in 1963). The normal rainfall for February 16 is 0.20 inches compared to a record total rainfall of 1.63 inches (occurring in 1965). There was a trace of snow on this date in 1895.

Mardi Gras has fallen on this date five times in the past. The climatological data from those dates can be found in the following table:

Year	Max Temp	Min Temp	Avg. Temp	Rainfall
1904	62	49	55.5	Trace
1915	61	48	54.5	0.00"
1926	62	47	54.5	0.00"
1988	59	33	46	0.00"
1999	76	50	63	0.00"
Avg	64.0	45.4	54.7	0.00"



NWS Cooperative Observer Program

Ashley Hayes

The National Weather Service's (NWS) Cooperative Observer Program (COOP) is the nation's oldest and largest weather network. Many citizens including George Washington, Thomas Jefferson, and Benjamin Franklin maintained weather records. In 1890, the program was established to formalize the collection of meteorological observations and establish (record) climate conditions in the United States. Today, more than 11,000 Cooperative Weather Observers across the United States donate more than one million hours each year to collect daily hydro-meteorological data.



Cooperative Weather Observers typically provide observational meteorological data, usually consisting of daily maximum and minimum temperatures, snowfall, and 24-hour precipitation totals, required to define the climate of the United States and to help measure long-term climate changes. In the event of significant weather, COOP Weather Observers may also be called to provide observational meteorological data in near real-time to support forecast, warning and other public service programs of the NWS.

There are currently 93 Cooperative Weather Observers in our Parish/County Warning area. If you are interested in becoming a Cooperative Weather Observer for the National Weather Service or want more information, please contact the Observing Program Leader (OPL), Francida Moore at (504)522-7330/(985)649-0357 (ext. 5 wait for prompt then ext. 5 again) or email us at sr-lix.webmaster@noaa.gov with the subject reading "COOP."

The National Weather Service New Orleans/Baton Rouge Forecast Office is saddened by the loss of two dedicated cooperative observers.

Mr. Cyril John Doiron passed away in late December 2009. Mr. Doiron served as the cooperative observer for Brusly, Louisiana. Beginning in March of 1987, he recorded daily temperatures and precipitation, and we are grateful for his service to the cooperative program. Mr. Doiron also worked as a meteorologist for the Weather Bureau.

Mr. Frank Kermit Boykin passed away in early January 2010. Mr. Boykin began recording daily precipitation for Centerville, Mississippi in December of 2005. Though he was only a cooperative observer for 4 years, his service to the program is greatly appreciated.

The staff of WFO LIX extends its condolences to the families of these two men.



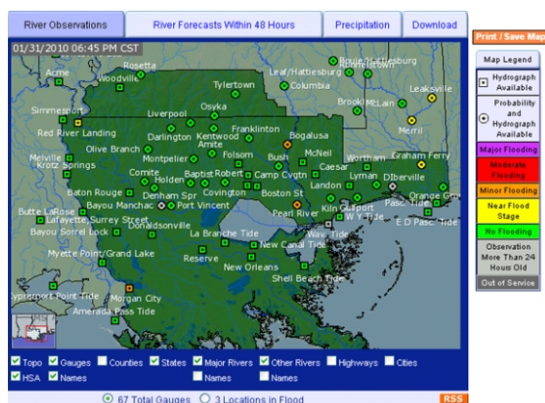
Flood Safety Awareness

Flood Safety Awareness Week

March 15-19, 2010

Flooding is the type of hazard that can occur across the span of the country and any time of the year whether it be river flooding, flash flooding, or inland tropical flooding. Each year, floods result in more fatalities than any other form of weather and cause damages in excess of \$5.2 billion. Three-quarters of all presidential declared disasters result from floods. The purpose of National Flood Safety Awareness Week is to highlight some of the many ways floods can occur, the hazards associated with floods, and what you can do to mitigate the impacts of an event.

One way to reduce the “element of surprise” is by keeping yourself informed through AHPS (Advanced Hydrologic Prediction Service). Through this service, you can find new forecast information depicting the magnitude and uncertainty of occurrence for hydrologic events. The following types of information are available on the web in a timely and user friendly manner:



- Hydrographs Displaying observed river levels for the past 2 days and forecasted levels out 7 days
- Probability forecasts with river level exceedence information for the next 30 days
- Flood forecast maps showing locations forecasted to be inundated

The Centers for Disease Control report that over half of all flood-related drownings occur when a vehicle is driven into hazardous flood water. The next highest percentage of flood-related deaths is due to walking into or ear flood waters. Why? The main reason is people underestimate the force and power of water. Many of the deaths occur in automobiles as they are swept downstream. Of these

drownings, many are preventable, but too many people continue to drive around the barriers that warn you the road is flooded. For this reason, the National Weather Service started the Turn Around Don't Drown campaign to warn people of the hazards of walking or driving a vehicle through flood waters.

The reason that so many people drown during flooding is because few of them realize the incredible power of water. A mere six inches of fast-moving flood water can knock over an adult. It takes only two feet of rushing water to carry away most vehicles. This includes pickups and SUVs. If you come to an area that is covered with water, you will not know the depth of the water or the condition of the ground under the water. This is especially true at night, when your vision is more limited. Play it smart, play it safe. Whether driving or walking, any time you come to a flooded road, **TURN AROUND, DON'T DROWN!**

Follow these safety rules:

- Monitor the NOAA Weather Radio, or your favorite news source for vital weather related information.
- If flooding occurs, get to higher ground. Get out of areas subject to flooding. This includes dips, low spots, canyons, washes etc.
- Avoid areas already flooded, especially if the water is flowing fast. Do not attempt to cross flowing streams. **Turn Around Don't Drown™**
- Road beds may be washed out under flood waters. **NEVER** drive through flooded roadways. **Turn Around Don't Drown™**
- Do not camp or park your vehicle along streams and washes, particularly during threatening conditions.
- Be especially cautious at night when it is harder to recognize flood dangers.



Flood Safety Awareness

Tropical Cyclone Inland Flooding

When it comes to tropical cyclones (a generic term for a hurricane, typhoon, or tropical storm) wind speeds do not tell the whole story. Intense rainfall, not directly related to the wind speed of a tropical cyclone, often causes more damage. Since the 1970s, inland flooding has been responsible for more than half of the deaths associated with tropical cyclones in the United States. Typically, greater rainfall amounts and flooding are associated with tropical cyclones that have a slow forward speed or stall over an area.

Q: What do I need to know about inland flooding from tropical cyclones?

- Inland freshwater floods accounted for more than half (59%) of U.S. tropical cyclone deaths over the past 30 years.
- Rainfall is typically heavier with slower moving storms as slower moving tropical cyclones allow heavy rain to persist over a location.

Q: What types of inland flooding are caused by tropical cyclones?

- **Flash Flooding** occurs in creeks, streams, and urban areas within a few minutes or hours of excessive rainfall. Rapidly rising water can reach heights of 30 feet or more. Streets can become swift moving rivers and underpasses can become death traps.
- **River Flooding** occurs from heavy rains associated with decaying hurricanes or tropical storms, and in extreme cases, river floods can last a week or more.

